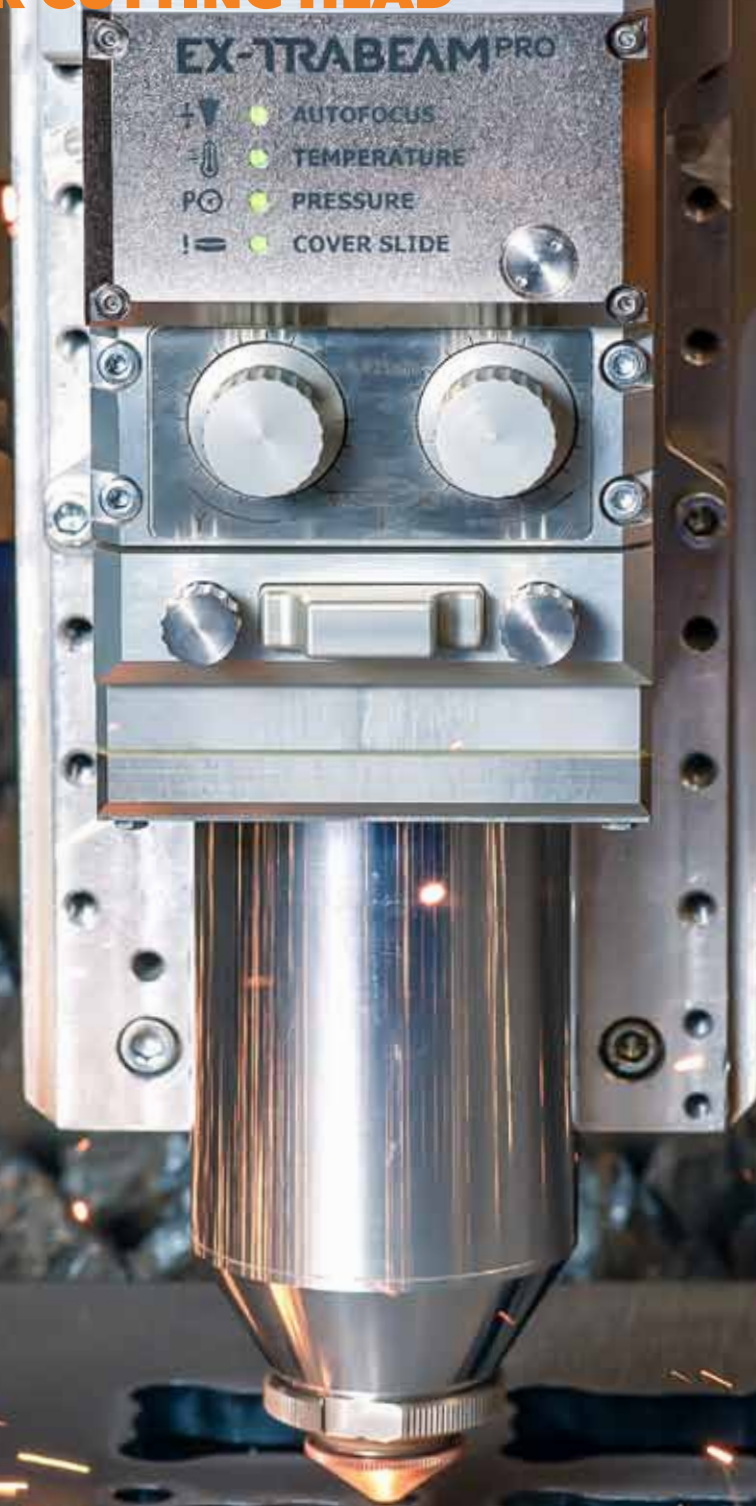


EX-TRABEAM PRO

FIBER LASER CUTTING HEAD



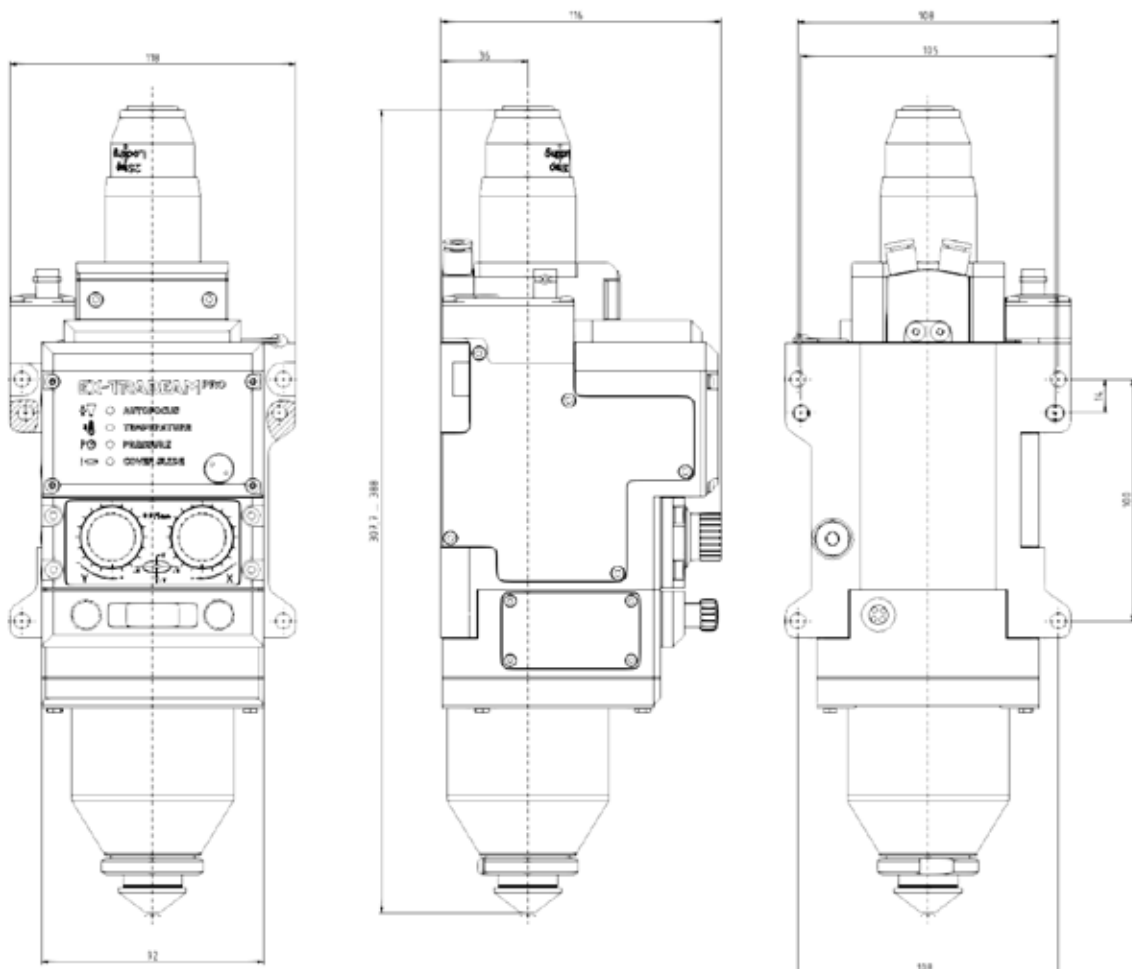
EX-TRABEAM® PRO - 8 KW SOLID-STATE LASER CUTTING HEAD WITH LOW-DRIFT REGULATION AND AUTOFOCUS FOR BEST CUTTING RESULTS.

The cutting head EX-TRABEAM® PRO is suitable for modern, powerful laser cutting machines equipped with a solid-state beam source, which operate in a wavelength range of 1030 nm to 1130 nm and a power of up to 8 kW.

BASIC DESCRIPTION

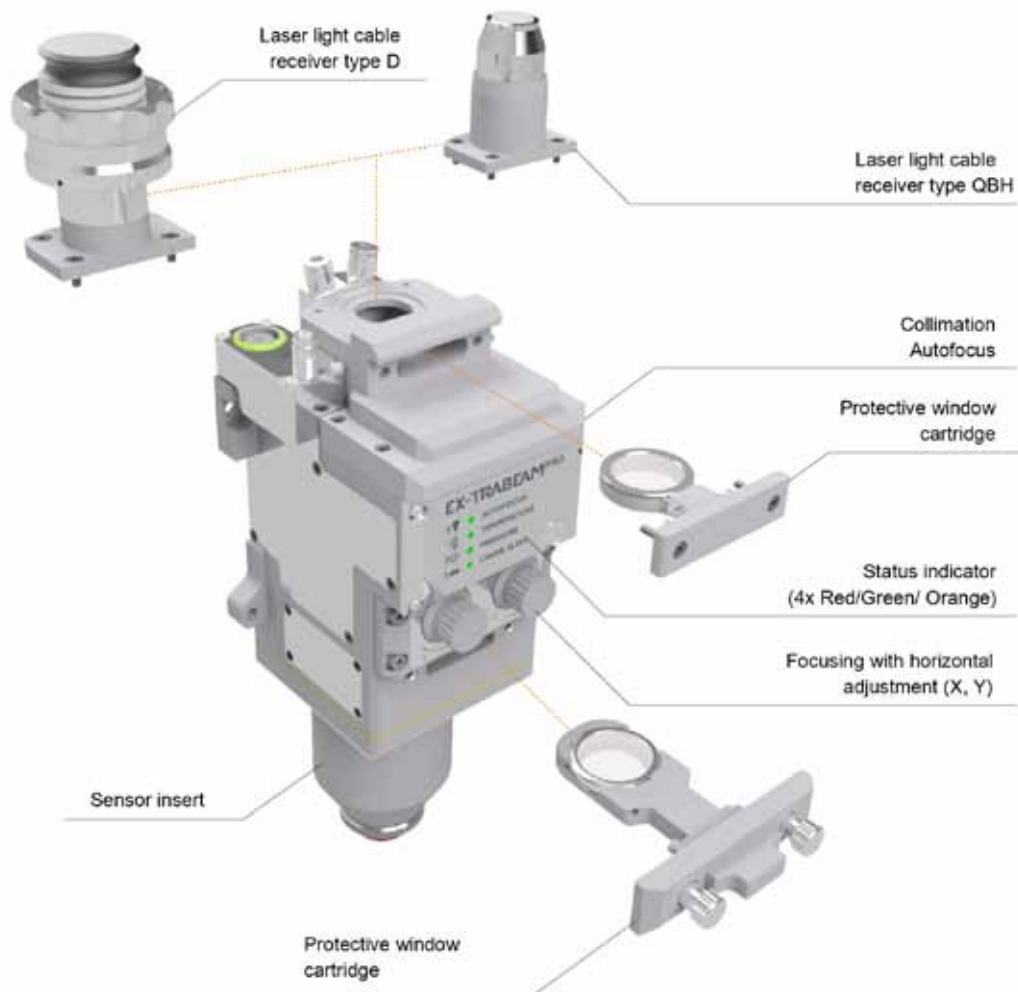
- A high mechanical seal for protecting the optical components, including sealing monitoring (Smart Protection).
- Front-operated beam adjustment.
- Optimized laser cutting head with autofocus function for better piercing process.
- User-friendly service concept, the unit allows trained and certified system integrators fast and uncomplicated change of optical components.
- EX-TRABEAM® PRO operates with a collimating focal length of 100 mm as well as focused focal lengths of 125 mm, 150 mm, 175 mm or 200 mm with a cutting gas pressure up to maximum of 25 bar.

DIMENSIONS (MM)



FIBER LASER CUTTING HEAD

STRUCTURE OF LASER CUTTING HEAD AND REPLACEMENT PARTS



Article Nr.	Description	Std. pkg.
XB-03-01-001	Protective glass process 32 X 5 mm	1
XB-04-03-001	Protective glass backup 32 X 2 mm	1
XB-04-03-002	Protective glass fiber 27 X 2 mm	1
XB-04-01-002	Protective glass drawer process-side	1
XB-04-01-001	Protective glass drawer on the fiber side	1
XB-03-01-002	Seal protection glass (glass 5 mm)	1
XB-04-02-001	Lens package collimation	1
XB-04-02-002	Lens package focusing Fig. 1.25	1
XB-04-02-003	Lens package focusing Fig. 1.50	1
XB-04-02-004	Lens package focusing Fig. 1.75	1
XB-04-02-005	Lens package focusing Fig. 2.00	1
XB-04-00-001	Sensor insert Fig. 1.25 (including screw set)	1
XB-04-00-002	Sensor insert Fig. 1.50 (including screw set)	1
XB-04-00-003	Sensor insert Fig. 1.75 (including screw set)	1
XB-04-00-004	Sensor insert Fig. 2.00 (including screw set)	1
XB-03-01-003	Nut	1
XB-02-01-001	Sensor unit	1
XB-02-02-001	I-O adapter board	1
XB-02-03-001	Control cable (19-pin) 20 meter	1
XB-02-03-003	Control cable (19-pin) 3 meter	1
XB-02-03-002	BNC-cable 20 meter	1
XB-02-03-004	BNC-cable 3 meter	1
XB-03-02-001	Ceramic nozzle holder	1

Article Nr.	Description	Std. pkg.
XB-03-03-001	Single nozzle 0.8 mm	10
XB-03-03-002	Single nozzle 1.0 mm	10
XB-03-03-003	Single nozzle 1.2 mm	10
XB-03-03-004	Single nozzle 1.5 mm	10
XB-03-03-005	Single nozzle 1.8 mm	10
XB-03-03-006	Single nozzle 2.0 mm	10
XB-03-03-007	Single nozzle 2.3 mm	10
XB-03-03-008	Single nozzle 2.5 mm	10
XB-03-03-009	Single nozzle 2.7 mm	10
XB-03-03-010	Single nozzle 3.0 mm	10
XB-03-03-011	Single nozzle 3.5 mm	10
XB-03-03-012	Single nozzle 4.0 mm	10
XB-03-03-013	Single nozzle 5.0 mm	10
XB-03-03-014	Double nozzle 0.8 mm	10
XB-03-03-015	Double nozzle 1.0 mm	10
XB-03-03-016	Double nozzle 1.2 mm	10
XB-03-03-017	Double nozzle 1.5 mm	10
XB-03-03-018	Double nozzle 1.8 mm	10
XB-03-03-019	Double nozzle 2.0 mm	10
XB-03-03-020	Double nozzle 2.3 mm	10
XB-03-03-021	Double nozzle 2.5 mm	10
XB-03-03-022	Double nozzle 3.0 mm	10
XB-03-03-023	Double nozzle 3.5 mm	10

SPECIFICATION OF LASER CUTTING HEAD

OPTICAL SYSTEM

Focal Length (magnification):	125 mm (1.25) 150 mm (1.50) 175 mm (1.75) 200 mm (2.00)
Adjustment range Focusing (horizontal):	±1 mm
Wavelength range:	1030 ... 1130 nm
Max. laser power:	8 kW
Max. beam parameter acceptance (half angle):	125 mrad
Laser light cable receiver:	Optoskand QBH, Trumpf-D
Diameter laser light cable:	Up to 200 µm

FOCUS RANGE

Magnification	1.25	1.50	1.75	2.00
In work piece direction (-) in mm	9	13	18	20
In nozzle direction (+) in mm	6	9	13	15
Correction range / offset Z-axis +/- in mm	1	1.5	2	3

HOUSING

Dimensions:	118 x 116 x max. 388 mm (depending on configuration)
Weight:	ca. 5 kg (depending on configuration)
IP-Protection:	64 (When the fiber is inserted)

SUPPLY

Electric:	DC 24 V / max. 4 A
Process gas:	Inert and Active gases, max. 25 bar
Cooling gas:	Air, max. 5 bar
Cooling circuit:	Flow min. 1.5 l/min, Operating pressure max. 5 bar

AVAILABLE SYSTEMS

SYSTEM

	Part Number	Magnification	Cable Receiver
EX-TRABEAM®Pro F125 QBH	XB-00-00-001	1.25	QBH
EX-TRABEAM®Pro F150 QBH	XB-00-00-002	1.50	QBH
EX-TRABEAM®Pro F175 QBH	XB-00-00-003	1.75	QBH
EX-TRABEAM®Pro F200 QBH	XB-00-00-004	2.00	QBH
EX-TRABEAM®Pro F125 D	XB-00-00-005	1.25	LLK-D
EX-TRABEAM®Pro F150 D	XB-00-00-006	1.50	LLK-D
EX-TRABEAM®Pro F175 D	XB-00-00-007	1.75	LLK-D
EX-TRABEAM®Pro F200 D	XB-00-00-008	2.00	LLK-D

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